Commodore Launches Amiga

New York, July 23, 1985. . .In a special presentation filled with music, graphics and talks of rosey futures, Commodore grandly unveiled their new Amiga Personal Computer last night. With hundreds of editors, software developers, shakers and movers looking on, the computer touted as the first "personal supercomputer" was demonstrated.

The Amiga Personal Computer uses a 68000 microprocessor (as does the Macintosh) as the heart of a 256K RAM 16bit multitasking operating environment. Three new proprietary chips supply hardware control of such features as graphic block motion, split screens, animation, sound processing and all I/O—these are features usually handled by resident firmware (ROM). Four graphic modes are supported with varying levels of resolution and color selection. Up to 32 colors can be used in the graphics modes out of a possible 4096 available. Sound on the Amiga is produced through four digital audio channels with stereo separation capabilities. Each channel can produce complex waveforms while using only a small percentage of the total processing power. Multitasking is possible as a result of the 68000 processor and the new proprietary chips. It was demonstrated on a screen containing four windows, all running graphics programs, with the operating system icon menu simultaneously being moved around and manipulated.

The launch presentation itself was a fully orchestrated event designed to catch the attention of the business, graphics and games developers alike. Held at the Vivian Beaumont Theatre Building of Lincoln Center, the evening was divivded into two segments. First was the grand unveiling complete with a laser light show and pulsating music, followed by various graphic, sound and multi-tasking demonstrations. When this segment ended, the presentation continued in the atrium of the building with both Commodore and third-party developers showing off their application and recreation software.

In all, the night was very impressive, the Amiga superb, and the whole event quite a change of pace for Commodore. What is the probable future of another personal computer, regardless of the power, in today's troubled computer marketplace? If seeing is believing, then the Amiga is beyond today's market.

Be sure to find the Amiga product specifications in this issue of INPUT/OUTPUT.

QuantumLink Unveiled and Special Offer Presented at M.A.R.C.A. Convention

In conjunction with Commodore, Quantum Computer Services is offering user group members free advance use of the forthcoming QuantumLink network. QuantumLink won't be available to the general public until October. However, user group members who would like to participate in pre-release testing will be sent the Q-Link software disk free of charge, and there will be no charge to use Q-Link prior to October 1.

QuantumLink is a new nationwide telecommunications service which will include the Commodore Information Network, software previews, electronic messaging, bulletin boards, teleshopping, news, online chat, and interactive telegaming with full-color graphics.

QuantumLink will initially be offered to owners of Commodore 64 and 128 computers; the services will be made compatible with other computers, including Amiga, in the near future. Q-Link subscribers will pay a monthly fee of $9.95, which includes unlimited access to many of the offered services and one hour of access to supplementary services. Subscribers who use more than one hour of supplementary services will be charged six cents per minute for the extra usage.

Quantum is very interested in refining Q-Link to optimally meet the needs of user group members. During the pre-release testing phase, users will be encouraged to submit suggestions and participate in online discussion forums.

To participate in the Q-Link pre-release testing, you must own a Commodore 64 or 128 and a disk drive, and you must use your modem to register online. You can register starting August 15 by calling 800-833-9400 (press return twice after you are connected, and then answer the questions that appear).

A calendar of events on QuantumLink for the month of September is on the last page of the newsletter.

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Editorial

Well, here is issue #3 of INPUT/OUTPUT (my first official issue as editor). As you will see from looking through the pages of this issue, we are trying to provide you with the information you most want to know. We have made it through this issue and may be able to make it through part of the next issue, but we need some more ideas. What do you want to know? Some possible ideas for upcoming issues include; changing the device number on a 1526/MPS-802, updates of all service centers, product specifications for the Amiga monitor and other peripherals, and how to construct a monochrome cable to get 80-column output from the C128 on the 1702. These all seem like good articles to us, but what do you think? Is there something else that you would rather see? Drop us a line so that we can continue to call this newsletter INPUT/OUTPUT.

User Group Survey #1

We would like to thank everyone who took the time to fill out and send us the surveys from INPUT/OUTPUT #1. In all, we have received something like 3300 responses to that survey. A very impressive total! Before I go into some of the results of the survey, I want to make a comment about xeroxing the surveys. If you need to xerox copies of the surveys for friends, relatives, or whomever, please do not change the size when you copy.

The post office has very strict rules about the size of business reply mail, and they have notified us a couple of times now about pieces that were mailed to us smaller than regulations allow. Enough of that, on to the results.

Are you an average User Group member? If so then you are male, between the ages of 35 and 49 and work in either a technical, professional or other (seems we had a good number of these) occupation. Over 93% of the people responding owned a C64 with a couple of VIC20, Plus/4, and SX-64 owners filling out the rest. Over 96% of you own disk drives, 81% monitors and 78% printers. The most common disk drive was the 1541 (92%), the most common monitor a television (38% to 34% over the 1702!) and the most common printer was the Gemini (20%). 47% of you own a modem, but a little surprising is the fact that only 43% of the modem owners subscribe to CompuServe, and only 75% subscribe to any BBS at all. By the way, the 1600 and 1650 were by far the most common modems (54% total). The most common programming language was BASIC (63%) with machine language (42%) and Comal (17%) taking second and third. The most common other interests were home applications (60%), business applications (54%) and telecommunications (50%). A couple of growing SIGs seemed to be industrial use (11%), ham radio (12%) and CAD/CAM (13%). The most interesting news to the marketing department here was that over 30% of you said that you were intending to buy a Commodore 128. They extend their thanks.

We'll have survey #2 results next issue. Thanks again to all of you who responded.

Following are the suggested retail prices for the Commodore C-128 personal computer and related peripherals:

Model		Suggested Retail
C128 —	Computer	$349.95
C1571 —	Disk drive	$299.95
MPS 1000 —	Dot matrix printer	$299.95
C1902 —	RGB/I, composite monitor	$349.95
C1670 —	1200 Baud modem	$199.95
C1350 —	Mouse controller	$ 49.95
C1700 —	256K memory expander	$199.95
C1750 —	512K memory expander	$299.95

Amiga Personal Computer Product Specification

- Motorola 68000 16/32 bit processor running at 7.16 MHZ.
- Proprietory Amiga Display Co-Processor, Image Data Mover (Bit-Blitter) and Audio Processing/IO Control Chips.
- ROM-RAM Resident Real-Time, Multitasking Operating System with extensive sound, graphics and animation support. (192K Bytes.)
- 256K Bytes of Ram, internally user expandible to 512K. Externally expandable to 8 Megabytes, supported by the Operating System.
- Built-in 3.5 inch double sided micro-floppy disk drive. Capacity 880K Bytes formatted.
- Two-Button Optical-Mechanical Mouse.
- Input-Output:

  Video Port 1 with simultaneous output of: NTSC, Composite, Digital RGB and Analog RGB. This port supports an (optional) Genlock unit for synchronizing the Amiga and an external video source together.

  Video Port 2 for connecting to a TV via a modulator. Standard NTSC output, with two sound channels mixed into a single channel.

  Video Port 3 NTSC Composite video.

  Two reconfigurable controller ports, for mice, joysticks, paddles, custom controllers.

  External Floppy Disk port, supporting up to three additional drives, including a mix of 3.5 inch and 5.25 inch units.

  RS232 Serial Port (DB25).

  Parallel Port configured for Centronics printer standard. Reconfigurable (DB25).

  Two Audio Channels (RCA Connectors).

  Keyboard Connector.
- Expandability: Two system expansion ports are provided. The full 68000 system bus is accessible to both.

  Memory Cartridge Port. A user-insertable 256K memory expansion cartridge may be loaded into the front of the Amiga.

  System Expansion Port. Removing a side-mounted panel gives access to a system bus edge connector. This may be used for attaching expansion chassis, hard disks, additional memory or special purpose hardware.

1670 MODEM/1200 — PRODUCT SPECIFICATION

OPERATING MODES	Auto Answer, Auto Dial (Touch-Tone or rotary), Auto Baud, Auto Speed, Auto Mode Selection (Originate or Answer)
DATA FORMAT	Binary, serial asynchronous
DATA RATE	1200 baud and 300 baud
MODULATION/ DEMODULATION	Bell 212A compatible, Bell 103 compatible
COMPUTER CONNECTION	Commodore user port (inverted TTL RS232)
PHONE CONNECTION	Direct connect using modular telephone jack (USOC RJ11C)
DIALING METHOD	Touch tone (DTMF) or rotary dialing
CARRIER INDICATOR	High frequency tone from built-in speaker
COMPUTERS	Commodore 128, C64, Plus/4, SX 64, Educator 64 and VIC 20
FEATURES	Utilizes the "AT" (HAYES*) command set, Full or half duplex operation, Built-in speaker, Terminal software diskette included, Free user ID, Password, and one hour subscription to CompuServe Information Service*, featuring Commodore's Information Network*, Comprehensive manual.
DIMENSIONS	3" x 5.5" x 1.25" (W x D x H) 77mm x 140mm x 32mm
NET WEIGHT	6.5 oz.
COLOR	Light beige

*CompuServe is a trademark of CompuServe, Inc. and H.&R. Block Co.
*Commodore Information Network is a service mark of Commodore Business Machines, Inc.
*Hayes is a registered trademark of Hayes Microcomputer Products, Inc.

Approved User Group Status

With the help of our new office assistant here (Cheryl Griffith), we have finally been able to sort through all of the applications for Commodore World that we have received. The first officially approved groups will be announced at the MARCA convention on Friday, July 26. In case you don't get a chance to come out to the show, here is a partial list of the groups that have been approved:

Your Commodore User Group
Westbrook, ME
Mike Procise, Sr. Coord.

West Michigan Commodore User Group
Hudsonville, MI
Ross A. Ringerwole, Pres.

Tri-City Commodore Computer Club
Richland, WA
Jack Garvin, Pres.

T.R.A.C.E The Richmond Area CE
Richmond, VA
E.M. Rexrode, Pres.

Salt City Commodore Club
Hutchinson, KS
Wendell D. Hinkson, Pres.

Pioneer Valley Commodore Club
Westfield, MA
Marvin S. Yale, Pres.

Heart of Texas Home U.G.
Waco, TX
James Damengeaux, Pres.

Triad C-64 User's Group
Greensboro, NC
Craig Smith, Pres.

Ewing Commodore User's Group
Trenton, NJ
John C. Jones, Pres.

Oswego Commodore User Group
Oswego, NY
John R. Boronkay

Central Ohio Commodore U.G.
Columbus, OH
Philip H. Lynch, Dir.

Commodore Computer Club of Toledo
Toledo, OH
James Cychler, Pres.

Commodore 64 Users Group
New Philadelphia, OH
Jeff Eklund

Marion Ohio Commodore U.G.
Marion, OH
Richard Munro, Pres.

AK-64 Users Group
New Kensington, PA
Alton E. Glubish, Pres.

Ocean State Commodore Group
Woonsocket, RI
Joseph D. Calo, Pres.

Dale City Commodore U.G.
Dale City, VA
Jack B. Doyle, Pres.

Henry County Commodore Comp. Club
Martinsville, VA
Ken Coffelt, Pres.

Central Washington Commodore U.G.
Yakima, WA
Eric Miller, Pres.

Commodore Home User's Group
Wheeling, WV
John Fijalkowski, Pres.

Commodore Users of Pensacola
Pensacola, FL
Vince Farrigia, Pres.

Miami 2064
Miami, FL
Jim Luftman, Pres.

Titusville Commodore Club, Inc.
Titusville, FL
Robert B. Murray, Pres.

Tri County Commodore U.G.
Ocala, FL
Helen Serine, Treas.

UNF Commodore Computer Club
Jacksonville, FL
Jay S. Huebner, Sec.

Canton Area Commodore U.G.
Canton, IL
Dr. Robert S. Smolich, Pres.

Okaloosa Commodore User's Group
Ft. Walton Beach, FL
Calvin Jones, Chairman

Commodore 64 U.G. of Orange County
New Hampton, NY
Stephen P. Gerstl, Pres.

Commodore U.G. of Durand, MI
Lennon, MI
Marla Romine, Sec.

Com. Ed. Employee Commodore U.G.
Joliet, IL
John McDowell, Pres.

Coastline Commodore Computer Club
Biloxi, MS
Norman R. Cyr, Pres.

Club-64
Holbrook, NY
Michael McGrath, Sec./Editor

San Diego Commodore User's Group
San Diego, CA
Jane Campbell, Sec.

Baltimore Area Commodore U.G.
Baltimore, MD
Clewell Howell, Jr., Pres.

Commodore Bay-64
Green Bay, WI
Richard F. Luxton, Pres.

Milwaukee Area Com. Enthusiasts
Milwaukee, WI
Timothy J. Pelzek, Pres.

Birmingham Commodore Club
Birmingham, AL
Harry Jones, Pres.

Montgomery Area Com. Komputer Soc.
Montgomery, AL
Charles Russell, Pres.

Scottsboro Com. 64 Users Group
Scottsboro, AL
Donald B. Bonsall, Pres.

Catalina Commodore Computer Club
Tucson, AZ
George Pope

Gila Hackers
Globe, AZ
Paul R. Machula, Chairman

Auburn Commodore Computer Club
Auburn, CA
Sherry Gilbert, Pres.

Commodore Connection
Concord, CA
Richard Moxley, Pres.

Santa Barbara Commodore U.G.
Santa Barbara, CA
Walter Hausz, Pres.

West Orange County Commodore U.G.
Huntington Beach, CA
Frank N. Holtzman, Pres.

Charlotte County Commodore Club
Port Charlotte, FL
Lee Traux

Knox Commodore Club
Galesburg, IL
Randy L. Fox, Pres.

Lane County Commodore U.G.
Eugene, OR
Maria Sayer, Pres.

Port 64
Rapid City, SD
Thomas S. York, V. Pres.

Bay City Commodore U.G.
Bay City, TX
Glenn McCarthy, Pres.

Tri State Commodore U.G.
Amarillo, TX
Michael H. Williamson, Pres.

Mountain Computer Society
Sandoy, UT
Don Jones, Chairman

User Group Survey 85.S03

1. Name _____
   Address _____ Apt. ____
   City _____ State _____ Zip _____

2. What is your age?
   ☐ 0-9   ☐ 25-34
   ☐ 10-17   ☐ 35-49
   ☐ 18-24   ☐ 50 and over

3. What is your sex?
   ☐ Male   ☐ Female

4. What is your occupation?
   _____

5. What is your annual household income?
   _____

6. What word processor do you use?
   _____

7. What data base management system do you use?
   _____

8. What spread sheet program do you use?
   _____

9. What is your favorite entertainment package?
   _____

10. Why did you purchase your Commodore computer?
    ☐ Cost   ☐ Quality
    ☐ Graphics/Sound   ☐ Reputation
    ☐ Software availability
    ☐ Other

11. Approximately how many commercial software packages do you currently own?
    ☐ 1-4   ☐ 10-24   ☐ None
    ☐ 5-9   ☐ 25-100

12. Do you write your own programs?
    ☐ Yes   ☐ No

13. How many hours per week do you use your computer at home?
    ☐ 1-3   ☐ 6-9   ☐ more than 12
    ☐ 3-6   ☐ 9-12

14. Do you use a brand other than Commodore at work or school?
    ☐ Yes   ☐ No

14A. If yes, what brand do you use?
     _____

14B. If other than Commodore, which was purchased first?
     ☐ Office   ☐ Home   ☐ Other

15. How many hours per week are spent using a computer other than at home?
    ☐ 1-3   ☐ 6-9   ☐ more than 12
    ☐ 3-6   ☐ 9-12

16. Which magazines do you subscribe to?
    ☐ Ahoy   ☐ Family Computing
    ☐ Byte   ☐ Info 64
    ☐ Commodore Microcomputers ☐ Midnight Gazette
    ☐ Commodore Power/Play   ☐ Personal Computing
    ☐ Compute   ☐ Popular Computing
    ☐ Compute's Gazette   ☐ Run
    ☐ Creative Computing   ☐ The Guide
    ☐ Dr. Dobbs Journal   ☐ TPUG
    ☐ ENTER   ☐ Your Commodore

17. How much time do you spend with each issue?

	30 min. or less	1-2 Hrs.	3-4 Hrs.	More than 4
Ahoy				
Byte				
Commodore Microcomputers				
Commodore Power/Play				
Compute				
Compute's Gazette				
Creative Computing				
Dr. Dobbs Journal				
ENTER				
Family Computing				
Info 64				
Midnight Gazette				
Personal Computing				
Popular Computing				
Run				
The Guide				
TPUG				
Your Commodore				

18. Have you ever purchased a computer product because of magazine advertising?
    ☐ Yes   ☐ No

19. What feature articles or regularly scheduled columns do you find most valuable in a computer publication?
    ☐ Hardware reviews
    ☐ Software reviews
    ☐ Business Applications
    ☐ Home Applications
    ☐ Education
    ☐ Games and Entertainment
    ☐ Programmer's Tips
    ☐ Type-in Programs
    ☐ Unusual Applications
    ☐ Telecommunications
    ☐ Industry News
    ☐ Calendar of Events
    ☐ User Group Information
    ☐ New Product Releases
    ☐ Gadget Building

20. Do you belong to a user group?
    ☐ Yes   ☐ No

21. How long have you been a member of a user group?
- [ ] Less than 6 months
- [ ] 6 months to 1 year
- [ ] 1 to 2 years
- [ ] More than 2 years

22. Have you ever been or are you presently an elected official of a user group?
- [ ] Yes   [ ] No

23. Have you ever written a computer-related article for publications?
- [ ] Yes   [ ] No

24. Have you ever taught a computer-related class or tutorial?
- [ ] Yes   [ ] No

24A. If yes, what topic or topics have you taught?

_____

25. Generally speaking, do you feel that computer user groups are beneficial to computer users?
- [ ] Yes   [ ] No

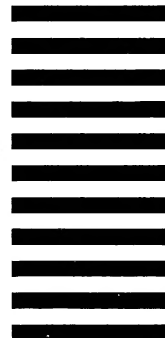26. What in your mind is the most beneficial result you have experienced from belonging to a user group?

_____

_____

Attn: Pete Baczor
85.S03

_____

_____

_____
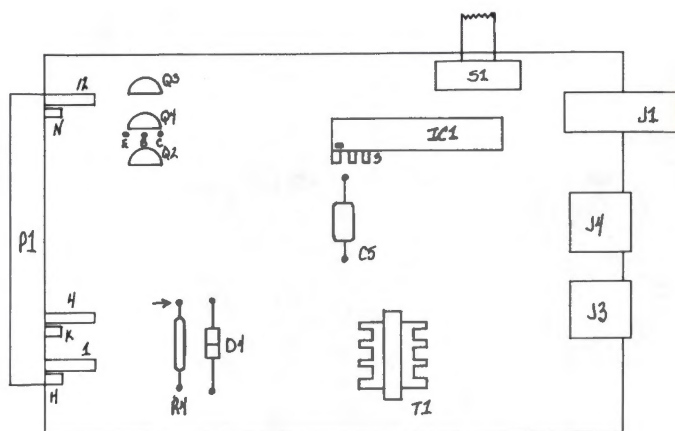
Common Questions about the 1660 Modem/300 and Their Solutions

Most of the following solutions involve opening the 1660 modem. The most efficient way to do this is to carefully drill out the four posts using a ¹⁄₁₆- to ¹⁄₈-inch drill bit. Be carefull of the wires connecting the Piezo sounder to the board because they are short and thin.

WARNING

OPENING THE CASE OF THE 1660 MODEM WILL VOID YOUR WARRANTY. THIS PUBLICATION TAKES NO RESPONSIBILITY FOR ELECTIVE SURGERY ON YOUR 1660. THESE SERVICES SHOULD ONLY BE PERFORMED BY A QUALIFIED TECHNICIAN.

Problem 1—Touch-Tones sometimes do not work. I must unplug then replug the audio jack to make them work each time.
Solution—The Touch-Tone input needs a DC bias path to ground which the C64 does not always supply. If this problem occurs, it can be remedied by adding a 47K ohm resistor across J1 to ground (see above figure). Customer support is making a list of people who call with this problem and Commodore will provide a patch cord with the resistor inside to be installed in series with the audio input jack. Commodore will mail these customers a patch cord, at no cost, when they are available. Also the touch tones will not work if the user does not have Touch Tone service.

Problem 2—The speaker buzzes when not in use.
Solution—This is not a design problem with the modem and will incur a service fee to be modified. A diode (1N4001) can be added between R4 and the collector of Q4 to squelch the speaker when "on-hook".
Problem 3—The carrier detect signal is not available at the user port connector of the modem.
Solution—This is correct and is necessary to ensure Plus/4 compatibility. The second generation 1660 modem will provide carrier detect to the connector. With this version, Plus/4 owners will have to cut an exposed trace on the underside of the PC board of the modem. The current version of the modem may be altered to provide carrier detect at the connector by jumpering pin 3 of IC1 to pins H and K of P1. If this modification is implemented, the modem will not work with the Plus/4.
Problem 4—The 1660 will not work with my BBS. All I hear is "DEE - DOO - DEE - DOO - ..." and it will not detect carrier unless I switch to answer.
Solution—In this case the 1660 is calling a Westridge or Total Communications modem. This is an auto-originate and auto-answer modem that checks for originate with the DEE's and then checks for an answer with the DOO's. The problem is that the DEE does not last long enough for the 1660 to hear it. By changing C5 from .33 microF to .1microF, the carrier detect time is lessened and the connection is made. This is not a design problem with the 1660 but rather a compatibility problem with the modems mentioned. Of course, this problem can be avoided by switching the modem to answer after dialing.
Problem 5—The 1660 does not work and makes a terrible buzzing sound when used with my third party monochrome monitor.
Solution—First check your video cable. Since the 1701 or 1702 are not being used, the cable may not support audio output. Check to see if the audio input of the modem is electrically connected to pin 3 of the DIN cable (3 o'clock as you look into the DIN plug). Very possibly, a video signal has been fed into the modem's audio input.
Problem 6—I can't get back to the HiggyTerm main menu.
Solution—Use SHIFT — RUN/STOP
Problem 7—The speaker is too loud.
Solution—The resistor in series with the piezo sounder may be increased to reduce the volume. You may also use a variable resistor here as a volume control.

This should answer most of the questions on the 1660. The second generation of the 1660 should resolve most of these problems. If there are any further questions on the modem or its operation, call Commodore Customer Support at 1-(800)-247-9000.

SEPTEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 Chat with new friends in PEOPLE CONNECTION	**2** Labor Day	**3** It's back to school. Practice typing with "MASTERTYPE" in the SOFTWARE SHOWCASE	**4** Looking for software? Check the SOFTWARE CATALOG	**5** Q-LINK FORUM 10PM Tell us how we can improve Q-LINK!!	**6** Have you played Impossible Mission? Choose SOFTWARE PREVIEWS	**7** Looking for a good movie? Check the Movie Reviews in JUST FOR FUN
8 NFL season starts today	**9** AMIGA FORUM 9PM	**10** For a weekly overview of activity in the COMMODORE INFORMATION NETWORK, check the Commodore Exchange Weekly	**11** Q-LINK FORUM 9PM Read USA TODAY Hotline for late breaking news	**12** Lose weight with "THE MODEL DIET". Now available for previewing in the SOFTWARE SHOWCASE	**13** Share your thoughts about QUANTUMLINK — Use the Suggestion Box in THE CUSTOMER SERVICE CENTER	**14** Missed your favorite Soap?? Check the Soap Opera Summary in JUST FOR FUN for an instant update
15 Check your trivia knowledge in JUST FOR FUN 5	**16** COMMODORE USER GROUP FORUM 10PM	**17** HANGMAN TOURNAMENT 9PM	**18** MOVIE CRITIC FORUM 9PM Discuss new movies with a popular critic	**19** Q-LINK FORUM 10PM	**20** Need help with your Commodore? Try Commodore Helpline	**21** What's new in Hollywood? Hollywood Hotline Report tells all!
22 Learn Italian— download the software from the preview library	**23** Q-LINK FORUM 10PM	**24** COMPUTER TUTOR 10PM Learn more about your computer by talking with a Commodore Wizzard!!	**25** ROCKNET FORUM 9PM Discuss rock 'n roll with an industry expert	**26** FOUR-IN-A-ROW TOURNEY 9PM	**27** "Our greatest natural resource is the minds of our children." Walt Disney	**28** Help a friend become a QUANTUMLINK subscriber. Check the CUSTOMER SERVICE CENTER
29 Farmers Almanac says rain tomorrow. Check USA TODAY's Weather Hotline to be sure	**30** WORLD PREMIER SOFTWARE A new program will be available for preview starting today					